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UNITED STATES OF AMERICA

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DEPARTMENT OF ENERGY

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PUBLIC HEARING

ON THE SITE-WIDE ENVIRONMENTAL IMPACT STATEMENT FOR CONTINUED OPERATION OF LAWRENCE LIVERMORE NATIONAL LABORATORY AND SUPPLEMENTAL STOCKPILE STEWARDSHIP AND MANAGEMENT PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

PUBLIC COMMENT

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Friday, April 30, 2004

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The public comment came to order at 11:00 a.m. in room 1E-245 of 1000 Independence Ave, NE Washington, DC. Holmes Brown, Facilitator, presiding.

PRESENT:

Holmes Brown	Facilitator
Tom Grim	SW/SPEIS Document Manager
Gordan Guenterberg	LLNL
Janet Neville	NEPA Compliance Officer

PUBLIC PRESENT:

Ilene LaLand	Rhythm Workers Union
Paul Leventhal	Nuclear Control Institute
Victoria Samson	Center for Defense Information
Arjun Makhijani	IEER
Loulena Miles	Tri-Valley CAREs
Christopher Paine	NRDC
Jim Bridgman	ANA
Dianne D'Arrigo	NIRS

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A-G-E-N-D-A

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P-R-O-C-E-E-D-I-N-G-S

10:55 a.m.

FACILITATOR BROWN: It's now time to receive your comments for inclusion in the formal record, and this record will be transcribed by a court reporter.

I'll call on speakers in the order in which they signed up. Please come up to this podium and introduce yourself, providing an organization affiliation if appropriate. If you haven't signed in yet, just " I guess there's a sign-up sheet over on the side and we can add your name to the list.

If you have a written copy of your statement, after you've completed your statement you can give that to Tom, and he'll hand that on to the court reporter to cross check with his own record.

Also, if you have any appendices, things that you are not actually wanting to read but would like to have entered in the record for consideration, Tom will accept those as well and make those part of the record.

We have a smaller group signed up today than we've had at our previous meetings, but to

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ensure that people meet their schedules and everybody has an opportunity to speak I'll ask that if you can confine your remarks to ten minutes, that usually gives people enough time to get everything said.

Also, I should remind you that comments submitted, whether they are given on the public record or submitted in writing, by e-mail, fax or whatever, all receive equal consideration. The Department receives them and considers them all equally.

I'll give you notice at the nine minute mark, just so you can conclude your remarks, and also will call the next speaker at the same time, just so you have an opportunity to be ready.

Tom Grim will be serving as the hearing officer for the National Nuclear Security Agency for this hearing.

So, with that, if I may call our first signed-up speaker, who is Ilene LaLand.

Ms. LaLAND: Thank you. My name is Ilene LaLand, and I'm a part-time resident in Livermore, and what we've been dealing with over the many years that I've been there has been lots of pollution. Pollution, the grapes has been

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contaminated, the milk has been contaminated, honey has been contaminated. The soil has been contaminated, there's even been garden, you know, sludge that has been given to the community for their flower and vegetable production in their home communities that have been laden with different elements from the lab that they had no idea that they were receiving when they received it.

There's been enormous amounts of accidents, spills into the water. The lab has polluted two huge aquifers, and it did take a lawsuit, I believe, to get them to clean that.

There's, I believe, also a document that is significantly undercutting the clean-up plans at the lab right now, so this doesn't make me feel very comfortable about the protection and the way that they are working with the community. There's been accidents that have not even been told about to the community, the community hasn't been warned about them, so I'm concerned about the relationship that the lab actually has with the community.

I've been living in the Bay area for 20 years or so on and off, and we've been dealing with what the lab has already left behind in the past

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and are still producing.

Their protection to the community, like I said, has been very bad. So, my first question is about the clean-up and reducing the clean-up, and I'm wondering if that's because with all this additional plutonium and tritium coming out there and bio warfare, anthrax, botulism, the Plague coming out there, that we can trust the lab to not only be respectful with it, but to " how would they protect the community in case of an accident, in case of " it's on a fault line, there is " it's on the airline flight pattern, so there's numerous ways that accidents can happen, including terrorism. 1/04.01

And, in the pictures that you showed of the lab and site 300, it didn't show the dense, dense population that starts from across the street from the lab and goes all the way to San Francisco, and it's growing all the time. The open space around the lab right now is being filled it seems, there's construction going on all around it. So, it's getting more densely populated all the time.

And so, I want to know what the " how you would protect the people in Livermore if there was a terrorist attack on the lab, if there was an 2/30.01

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accident in the way of an earthquake, if a plane falls on the lab, like these things do happen, if it falls into a bio lab or into a room that has three times the amount of plutonium that it's allowed to have, how would you even evacuate Livermore, never mind 7 million people in the Bay area. When people are so close as across the street, and there's hundreds and hundreds of people living in these apartment houses, women, children, homes, how can you possibly protect them in the situation that I propose? 3/25.05

And, I just want to make a comment that we don't want this kind of stuff in our future. How could we be so tantalized by the idea of killing millions of people in other countries, that we would risk killing so many people in our own country, and destroying the environment to the point where our children, our grandchildren, will have to deal with this for the rest of their lives, maybe risking the ability for them to have children and grandchildren. 1/04.01 cont.

And, I want to make a comment that in my community I do not want " I don't want this built in my community, I don't want it going out into other communities and killing a lot of

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innocent people that don't deserve this anymore than we deserve it in Livermore. 1/04.01 cont.

Thank you.

FACILITATOR BROWN: Thank you very much.

Paul Leventhal. And, Paul will be followed by Victoria Samson.

MR. LEVENTHAL: Good morning, and thank you for the opportunity to make a statement.

My statement will focus on achievement in Appendix N of the Plutonium AVLIS project that is proposed. The Nuclear Control Institute, of which I'm the Founding President, strongly opposes, particularly on non-proliferation grounds, the Department of Energy's plan to provide the long dormant plutonium AVLIS plans at Lawrence Livermore National Lab. 4/01.01

In 1990, the Reagan Administration decided to zero out funding for the construction of the predecessor Special Isotope Separation, the SIS plant, a facility capable of purifying plutonium obtained from nuclear power plants, including the N Reactor, into material ideally suited for nuclear weapons. 5/27.01

The decision to halt work on the SIS plant at DOE's Idaho Falls site at that time,

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represented a major victory for nuclear non-proliferation. A key factor in the decision to cancel the plan was a report on the Nuclear Weapons Production Complex, by the National Research Council, that stressed the considerable proliferation risks posed by the plutonium isotope separation technology.

The report warned that, "Technology for converting reactive grade to weapons-grade plutonium forms a potential bridge between the civilian fuel cycle and weapons production." And, the report concluded, "Any additional decision to proceed with the SIS facility should explicitly consider the implications of the technology for nuclear proliferation." 5/27.01 cont.

And, I will conclude my remarks by calling for a separate non-proliferation impact evaluation to be made an integral part of the draft EIS that can be considered under the terms of NEPA.

The National Research Council report in December, `89, mirrored the non-proliferation arguments made in a letter signed by 31 experts on nuclear weapons and nuclear non-proliferation that was released the previous May by the Nuclear Control Institute. A letter which was sent to the 6/01.01

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committees of jurisdiction on Capitol Hill explained in detail the threat posed by the SIS technology, and to the vital separation of civilian and military uses of nuclear energy, and the dangerous precedent that the construction would set for non-nuclear weapon states.

Those arguments were influential in Congress' decision to delete most of the funding from the SIS project from the plutonium AVLIS project, and the Reagan Administration's eventual decision to kill it. And, those arguments, I contend, are equally applicable today and should be considered. 6/01.01 cont.

Proceeding with the plant, the signer of the letter warned, would do serious damage to the United States' longstanding national security objective of discouraging and inhibiting further nations or terrorists from acquiring nuclear weapons. And, among the signers of that letter were Gerard Smith, the former Chief SALT I negotiator and former Ambassador at Large for Nuclear Non-proliferation, Paul Warnke, the first U.S. Arms Control and Disarmament Agency Director, Peter Bradford, a former Commissioner of the Nuclear Regulatory Commission, Russell Peterson, former

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Director of the Congressional Office of Technology Assessment, and Friedman Dyson of the Princeton Institute for Advanced Study, as well as several other academic and independent experts on nuclear weapons matters. And, I have recovered this letter from the archives of the Nuclear Control Institute, and I've attached it to my testimony, and I would like it to be considered part of the record.

The experts asserted that construction and operation of the SIS plant would threaten U.S. non-proliferation objectives without providing offsetting national security benefits, and they cited four concerns.

The first was the potential use, according to DOE's own witnesses at that time, for the use of the plant on plutonium recovered from commercial spent fuel. The second was completion of the SIS plant could lead to the spread of SIS-type laser technologies worldwide and pose unprecedented challenges containing nuclear programs of emerging and advanced industrial states to exclusively peaceful purposes. The third was that the operation of the SIS-type facilities in nuclear non-weapon states would present a formidable safeguards task for the International

6/01.01 cont.

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Atomic Energy Agency, processing and storage of unprecedented quantities, large number of plutonium isotopes would require development of a new safeguards regime for which the IAEA, in the words of these experts, as "no previous experience and is ill-equipped," and that situation applies to this day. And last, the plutonium purification process carried out in an SIS plant could inadvertently completely thwart an important technical means to verify future arms reductions, thereby having an unintentional adverse effect on verification of arms control agreements between the United States and the then Soviet Union.

6/01.01 cont.

The experts concluded, "In view of the acknowledge surplus of plutonium in the U.S. nuclear arsenal, there are no clear national security benefits that offset the obvious nuclear proliferation and terrorism risks, as well as safeguards and verification problems opposed by the plant construction and use of the plant."

Now, it is by no means clear that there are national security benefits today that would justify DOE's planned revival of the plutonium laser isotope separation plant at this time at Livermore. The site-wide environmental impact

7/27.01

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statement speaks only of a "need for augmentation of the current inventory of special nuclear material, example, plutonium-enriched uranium, to support the Stockpile Stewardship Certification activities." The type of plutonium needed is not specified, but it is widely assumed that plutonium 242 is needed for hydrodynamic testing of a mock-up nuclear weapon during which high explosives are detonated and the resulting motions and reactions of materials and components are measured.

But, there is no analysis of why this isotope of plutonium could not be produced by simply irradiating target material in an operating reactor within the DOE complex, as had been done in the production reactors at the Savannah River site when they were operating. 7/27.01 cont.

Equally troubling is the absence of any discussion in the EIS of what mission the plutonium isotope separation plant, presumably with a 30-year design life, would be given after any campaign to separate plutonium 242 is completed.

The predecessor SIS plant was supposed to process eight to nine metric tons of DOE fuel-grade plutonium into weapons-grade plutonium over a period of less than ten years, and it had not been

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assigned an additional role after that work was completed. This was a matter of considerable concern at the time, because DOES Acting Assistant Administrator for Defense had testified before the House Armed Services Committee that commercial spent fuel, "is a potential" plutonium source for the SIS facility, although not part of present planning for the facility because a "major change in law" would be required.

The law he was referring to was the Hart Simpson Mitchell Amendment to the Atomic Energy Act, an act of 1982, prohibiting military use of commercial plutonium or enriched uranium. 7/27.01 cont. It was enacted directly in response to DOE's original mission for the SIS plant, that is, for the plutonium AVLIS technology, to produce weapons-grade plutonium from plutonium in commercial spent fuel, a practice that would have violated a basic tenet of U.S. non-proliferation policy, separation of civilian from military applications of nuclear energy, and only a congressional declaration of national emergency could have overridden that statute.

Given this troubling history, it is important to get assurances of what the plutonium

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isotope separation plant will not be used for, as it is to get details of what the plant would be used for.

Unless potential use of the plant as a bridge between military and civilian applications of nuclear energy is specifically ruled out, there is a strong likelihood that DOE will find a way to bridge the gap. 7/27.01 cont.

Now, the Bush-Cheney Energy Plan, released in May of 2000, makes clear that this Administration is favorably disposed toward the reprocessing of commercial nuclear power plant spent fuel. The energy plan cites the reprocessing experience of Britain, France and Japan, as an example for the United States to follow. There are high costs, severe security risks, unresolved waste disposal problems, and mounting stockpiles of unwanted plutonium associated with these programs, yet the nuclear industry and its allies on Capitol Hill have been pushing the Bush Administration to reverse the decisions against reprocessing made in the Ford, Carter and Reagan Administrations, and to follow the Europeans and the Japanese instead.

Now, a major defect of the draft Site-Wide Livermore EIS is that there is no non- 6/01.01 cont.

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proliferation analysis of the impact of the plutonium AVLIS program. NCI's position is that proliferation implications of the AVLIS plant must be included in the EIS, in the Site-Wide EIS, and thoroughly analyzed before any decision on proceeding with the plant is made. A non-proliferation impact analysis should be prepared and made an integral part of the EIS and subject to review under the terms of NEPA. 6/01.01 cont.

FACILITATOR BROWN: You're at nine minutes.

MR. LEVENTHAL: Okay, I just have about a minute more.

The review should include a thorough analysis of the impacts of the laser separation technology, which if developed and applied at Livermore could be disseminated or otherwise stimulate development of such plants in non-nuclear weapon states under civilian auspices for production of weapons-grade plutonium. 6/01.01 cont.

An example of such a transfer by DOE of military nuclear technology was the transfer to Japan in the 1980s by Oak Ridge National Laboratory of breeder-blanket reprocessing technology for separation of weapons-grade plutonium. The Oak

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Ridge blueprints were used for the design of Japan's RETF facility. This was deemed by DOE not to be a transfer of sensitive nuclear technology prohibited from export to a non-nuclear weapon state on the grounds that Japan already had a civilian reprocessing program, albeit one applied to spent fuel, not breeder-blanket material. The same logic that applied to future transfer of plutonium AVLIS technology to Japan on grounds that Japan already has a laser program, albeit profusion development, not plutonium confinement purposes.

The proliferation significance of the AVLIS technology has been made all the more apparent by Iran's admission last fall to the IAEA that it has been secretly pursuing a laser-based uranium enrichment program since `91. Previously, Iran had acknowledged only a research and development program involving lasers, not an enrichment program. Given the urgency of the United States' efforts to win wide international support for shutting down Iran's nuclear weapons program, this is surely precisely the wrong time to start up a nuclear weapons AVLIS program at Livermore.

In conclusion, I close with this

6/01.01 cont.

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statement, DOE would be well-advised to apply to the plutonium AVLIS facility the advice offered by the U.S. National Research Council in 1989, with regard to the SIS plant, and I quote, "Any decision to proceed should explicitly consider the implications of the technology for nuclear proliferation."

Thank you.

FACILITATOR BROWN: Thank you.

MR. LEVENTHAL: And, I'll submit my statement to the record.

FACILITATOR BROWN: Thank you.

Our next speaker is Victoria Samson and Arjun Makhijani will follow.

MS. SAMSON: Hi, I'm Victoria Samson, with the Center for Defense Information in Washington, D.C.

The recent released draft Site-Wide Environmental Impact Statement for the Lawrence Livermore National Lab tips the Department of Energy's hand toward this plan to not only maintain the U.S. Nuclear Arsenal, but to expand it.

The plan divulges that Lawrence Livermore is likely to develop diagnostics to enhance the United States nuclear test readiness

6/01.01 cont.

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level. This comes on the heels of repeated efforts by this Administration to do the same.

Last year, $24.89 million was requested so that DOE could decrease the amount of time needed to prepare and hold a nuclear test. Congress, after much debate, approved the amount and instructed DOE to keep the nuclear test readiness at its current level, 24 to 36 months.

But, in this year's budget request the Administration decided to ignore earlier congressional restrictions. Again, funding was requested for enhanced test readiness, this time $30 million is to create 18th month readiness level. This 21.4 percent increase over last year comes after repeated testimony by DOE officials to the safety and reliability of the U.S. Nuclear Arsenal. 8/39.01

The only possible need for new nuclear testing at this time would be to try out a new weapon design. In fact, funding has been requested for just that. The robust nuclear earth penetrator, or RNF, is portrayed by supporters as a weapon that could be used against hardened and deeply buried targets. $15 million was requested in FY 04, Congress approved $7.5 million for the project, and specified that none of the money could 9/02.01

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be used for engineering development.

This year, $27.6 million was requested for the RNF, an increase of 270 percent. Even more ambitious is the DOE's five-year plan, in which it estimates that $484.7 million will be spent on the RNF. DOE officials claim that this estimate is simply a placeholder for R&D work, but half a billion dollars pushes the RNF well past mere research project status. 9/02.01 cont.

The B-83, which has been worked on at Lawrence Livermore, is often brooded as a possible candidate for the RNF. Lab officials frequently promote their institutions as a home for the next generation of technology, pointing to their work on Stockpile Stewardship as a beneficiary of that relationship.

However, DOE is doing more than that. It is moving toward an enhanced nuclear test readiness posture, and aggressively spending on a new weapon design whose engineers are likely to push for testing. This spending will negatively affect international non-proliferation regimes. The RNF and enhanced nuclear test readiness levels show that the United States regards its nuclear arsenal as insufficient for international security 10/39.01, 02.01, 01.01

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needs.

If we continue to improve our nuclear arsenal, how can we realistically expect to stop other countries from following our lead? 10/39.01, 02.01, 01.01 cont.

Thank you.

FACILITATOR BROWN: Okay, Arjun, to be followed by Loulena Miles.

MR. MAKHIJANI: Thanks, I'm Arjun Makhijani. I'm from the Institute for Energy and Environmental Research in Takoma Park, Maryland.

I'm restricting my comments at this time to the plutonium processing, and I'm going submit written comments later on.

I think I am not convinced by the accident analysis in the PEIS, in the draft PEIS, I think, particularly, the accident probabilities that are being theoretically calculated are far too low. I've looked at all three analyses of the Department of Energy in other contexts, like the tank farm at Savannah River site, and found the details of the statistical models that are used, failure probabilities are inadequate taking into account of actual accidents and grouping them properly. So, I think typically, so far as my experience goes, these accident probabilities are 11/25.06

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seriously underestimated often. And, in order for an environmental impact statement to be properly evaluated by the public I do think that the raw data on the accidents, and how they have been grouped, and how the specific industrial experience of Rocky Flats has been taken into account needs to be published. A draft should be republished with this data, because it's not possible for us to independently evaluate how these accident probabilities have been developed. 11/25.06 cont.

And, I think in this case it's especially important as you are planning, in my opinion, to create at least a semi-industrial scale plutonium processing facility in a place where you've got people living, essentially, across the street from the site, and the site is not very large. This is not a Hanford or Savannah River site with hundreds of square miles that we are talking about, it's just a little over one square mile. 12/27.01

So, I think the public does need to be afforded the chance to look at the raw data, because not only in DOE, but in NASA and other contexts, officials that are promoting programs are typically quite optimistic about the rate of 11/25.06 cont.

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failure, and then when failure happens and it's catastrophic then it's really too late to fix the problem, especially when it comes to plutonium contamination. 11/25.06 cont.

My other comment at this stage relates to the waste stream. The Appendix N indicates that up to 10 kilograms of plutonium americium metal will be in the waste every year, maximum if you process 100 kilograms of plutonium. This is proposed to be sent either to Los Alamos for plutonium recovery or to WIPP. Now, the original 1995 WIPP certification and the baseline inventory report of 1995 does not include the disposal of Transuranic metal in WIPP.

It's been the position of the State of New Mexico that they are not going to allow you, allow the Department of Energy, to dispose of any Transuranic wastes that are not in that 1995 list. 13/27.03

And so, I think it's completely inappropriate for the Department to have included this as a possibility in the draft EIS without any indication that it has arrived at some kind of agreement from the state and Environment Department of the State of New Mexico that this is going to be allowed.

The other kind of escape hatch that I

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see is that you are going to send the waste to Los Alamos for plutonium recovery, but then you are going to wind up in the same problem, in that you will have plutonium americium waste, albeit of a smaller quantity, presumably in metal form, that will not be allowed to be disposed of in WIPP. And, I don't think that there is any analysis in this draft EIS of what's going to eventually happen with this waste and where it might be disposed of.

And, the other issue that I would like to take in the same vain is that Appendix N assumes that you are going to receive completely pure plutonium metal from Hanford, without any americium content. I'm quite mystified by this, because Hanford doesn't have any processing capability. The fuel-grade plutonium has been sitting around there for quite a while. There's going to be quite a lot of americium growth in it, so I cannot see how Livermore expects to receive clean material. I think this is a technically unsupportable assumption, and if there is support it would be good that it was explicit as to where and how this plutonium would be processed just prior to shipment to Livermore so that it doesn't contain americium, and what's going to happen to that americium and 13/27.03 cont.

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how it's going to wind up in WIPP. 13/27.03 cont.

Thanks.

FACILITATOR BROWN: Okay, Loulena Miles and Christopher Paine will follow.

MS. MILES: Hi, my name is Loulena Miles, and I'm the Staff Attorney with Tri-Valley CAREs, and I've come out from Livermore, California today.

Tri-Valley CAREs has come to all of the hearings, and we are here to talk about the fact that we believe the lab is moving in the wrong direction. We believe it's an inappropriate use of 14/02.01 taxpayer dollars in a post-Cold War Era to be recommitting the lab to an almost exclusive nuclear weapons mission for the indefinite future.

We also feel that it's irresponsible for such a community of premier scientific minds to conceive of conducting high-risk projects in the 15/14.01 midst of a seismically active and densely populated suburb community as the San Francisco Bay area.

We will be objecting to a number of projects in written comments, but today I just want to focus on the plutonium limit, the plutonium in the national ignition facility, and some recent information, letters that came from the Defense

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Nuclear Facility Safety Board.

Basically, the Site-Wide Environmental Impact Statement outlines the plans to more than double the amount of plutonium to over 3,000 pounds on a site that's only 1.3 square miles. No more than a few pounds can be stored safely in one place at one time, to avoid criticality. The lab has been cited on numerous times before for criticality violations.

As you know, plutonium is also 16/33.01 pyrophoric and it can spontaneously ignite in certain forms and under certain conditions. We are very concerned about the safe storage of plutonium, and we think that it should not " the level of plutonium should not increase, in fact, it should decrease as was stated in the 1992 Site-Wide Environmental Impact Statement.

So, recently on April 12, 2004, the Defense Nuclear Facility Safety Board drafted a letter to Lenton Brooks, the NMSA Administrator, outlining some very serious concerns that they had with the way that the Livermore Lab has been downgrading their filtration system around the plutonium " let me just quote it, "Of particular concern to the Board is the new approach adopted by

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the Lab to allow unfiltered release of radioactive material from the facility during accident scenarios." They talk about the ventilation system, portions of the ventilation system have been downgraded from their high reliability, and the letter calls for a response within 30 days to these allegations.

And, I want to just give you a little bit more specific information, and I want this to be a part of the record, and I want to evaluate it in the final document.

Many components of the safety class system in Building 332, the plutonium facility, have been downgraded, including the emergency power system, portions of the glove box ventilation system, portions of the room ventilation system, and the fire detection and suppression systems.

They say, "Livermore is pursuing a new approach to accident analysis in that potentially harmful consequences to the public are mitigated by the structural boundaries of Building 332, rather than the ventilation system. In the past, Building 332 relied on a safety class active ventilation system. To ensure radioactive materials released during an accident, such as fire, would be forced

17/25.07

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through a series of HEPA filters before being released to the outside environment. Under this new approach, it is assumed that the building's leak paths would physically reduce the release of unfiltered contaminants."

The reason the Lab is reducing the safety in the plutonium facility is because they have used some computer modeling, and the DNFSB has pointed out some of the errors in their computer modeling, including the fact that the model fails to account for the additional leak paths that would result from the use of emergency exit doors by personnel as they evacuate the building during a fire. And, they go on to say, in case you didn't know, evacuation is essential for worker protection, as described in the facility specific fire hazard analysis.

17/25.07 cont.

Another thing about their calculations is that they base the scenario on the fire lasting for only 30 minutes. In reality, the Board goes on to say that, "Such an event could continue for days until any airborne radioactive material released by the fire into the internal facility atmosphere had been removed by settlement, or released to the outside environment, or moved through remedial

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actions." And so, basically, they are saying that releases will continue to occur for much longer than 30 minutes, and could go on for days, and that the model does not look at the amount that would be coming from that. 17/25.07 cont.

And, another thing they talk about is that there's a sensitivity in the calibrations that needs to be done and the Livermore Lab did not do that in conducting the computer modeling for the input parameters.

So, that was one example of Livermore Lab downgrading their security systems around plutonium, the very material that the Lab was proposing to increase so significantly, over 100 percent, to over 3,000 pounds, a very difficult material to store safely.

Another news event that's recently occurred is that the General Accounting Office has called for the Livermore Lab to " or is saying that the Livermore Lab should probably be reducing the plutonium on site because of safety considerations.

In light of the DNFSB and the GAO information that's coming out, we urge that the determination to increase plutonium does not go forward, and that actually the plutonium on site is 16/33.01 cont.

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decreased. 16/33.01 cont.

And additionally, I just wanted to say a few words about the plutonium in the national ignition facilities. Basically, the Site-Wide Environmental Impact Statement does propose to include plutonium in the national emission facility. This is something that was in the initial reports around the national emission facility, however, the Lab did a non-proliferation review in 1995 that stated that fissile materials would not be included in the national emission facility at that time, and that part of the reason that the national ignition facility was not a great proliferation risk is because there will not " it is limited in the amount of weapons development information that it can provide. 18/01.01

And now, with the proposed new materials, that does increase significantly the usefulness of the national ignition facility for weapons development. As Ray Kidder said at the Livermore Lab hearings, who is a former scientist of Livermore Lab, and who founded the " one of the founders of the laser programs at the Lab, he said that this could even increase the usefulness of NEF for new weapons production, including weapons that 14/02.01 cont.

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are not currently in the arsenal at all. And, this is a significant concern for Tri-Valley CAREs. We are calling for a proliferation analysis as part of the NEPA review. 14/02.01 cont.

And, we would like the draft Environmental Impact Statement to be recirculated, so that the community could have an opportunity to comment on the proliferation analysis and the adequacy of that. 18/01.01 cont.

So, I would just like to close in saying that we feel it's reprehensible for the Department of Energy to be moving forward with plans to increase plutonium and such high-risk experiments at the Lab, also increase the bio-warfare agent programs at the Lab, at a time when the security is being severely questioned by many oversight entities, and the population increase is so significant in the San Francisco Bay area. 19/04.01

Thank you.

FACILITATOR BROWN: Christopher Paine, followed by Jim Bridgman.

MR. PAINE: My name is Christopher Paine, and I'm a Senior Analyst with the Nuclear Program of the National Resources Defense Council.

I'm going to go back to 1989, the year

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the Berlin Wall came down. At that time, DOE's budget for nuclear weapons activities was $4.25 billion, that's about $5.5 billion in today's dollars, and Lawrence Livermore's piece of that budget was $577 million, or about 13.5 percent.

Employment at LLNL stood at 8,200 full-time equivalents at that time, half of whom were supported by the DOE Nuclear Weapons Research Development and Testing Program.

Today, 15 years later, the Berlin Wall has disappeared. So has the Evil Empire, and the Soviet Communism that built it, but the DOE budget requests for nuclear weapons activities now stands at $6.81 billion, far above the Cold War average support level of $4.2 billion in current dollars. Lawrence Livermore's piece is a little under a billion, or 14 percent above where it was when the Wall came down.

Livermore's employment stands at 10,600 personnel, 30 percent above the 1989 level. The plutonium AVLIS project has been secretly, and in our view illegally, revived. This, frankly, is a ludicrous situation, and it should have been avoided. 20/27.01

In 1995, the Department's own Secretary

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of Energy Advisory Board Task Force on Alternative Futures for the Nuclear Weapons Laboratories, the so-called John Galvin Commission, named after the retired Chairman of Motorola, that August body recommended a restructuring of weapon design capabilities among the three nuclear weapons design laboratories, and noted that, "The restructuring would affect, primarily, weapons design capabilities where the largest functional redundancy exists, specifically, Lawrence Livermore National Laboratory."

The Galvin Commission recommended, "In light of the revised U.S. nuclear weapons requirements, including a planned reduction to around 5,000 weapons by 2003," they recommended that Livermore should transfer, as cost efficiency allows, its activities in nuclear materials development and production to the other design laboratories. The proposed restructuring would also have included all of Livermore's direct stockpile support activity to other " transferred to other weapons laboratories. 21/08.01

The Clinton Administration, to its lasting discredit, did not act on this recommendation when the political door to

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significant de-nuclearization was still open. The result has been a steady restoration and expansion of redundant nuclear weapons capabilities at Livermore, duplicating similar capabilities at Los Alamos, Sandia and the Nevada Test Site, in some cases resulting in weapons research and development capabilities in triplicate.

This document which is before us today, in this document NNSA proposes to modernize and significantly expand LLNL's plutonium processing inventories and pit fabrication operations, upgrading and expand tritium operations, and build brand new centers for high explosive development energetic materials processing at Site 300. All these capabilities already exist in some form in one or more DOE sites. Moreover, the Livermore site, penned in by suburbs as other commenters have noted, with hazardous activities densely packed within a one and a third square mile area, is highly vulnerable to external attack, and it's hardly the most appropriate place, and I would accentuate, the most reasonable place, for these activities to be conducted. 22/04.01

I mean, please recall that reasonable is an important criteria under NEPA.

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Another example of redundancy, in an age when the network is the computer, perhaps, the most egregious example of excess is the recent construction by NMSA at all three nuclear weapons laboratories of new supercomputing centers at an average cost of $2.9 billion per laboratory to fit each with state-of-the-art weapon simulation capabilities. I question, hasn't anyone at NSA heard of secure networking? One wonders.

By pointing out the extravagant redundancies that exist within the complex today, I do not mean to project that Livermore should bear the full brunt of any necessary consolidation, but only that some form of consolidation and rationalization of the complex is reasonably indicated. For example, Livermore has long demonstrated, and continues to demonstrate today, a comparative advantage over Los Alamos in weapons computing and software development. In a rationalized and restructured complex that should have been analyzed as a reasonable alternative for Livermore under this EIS, Livermore could be made the lead laboratory for weapons computing, and retain sufficient competence and technology base to continue its activities in non-proliferation,

23/08.01

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nuclear materials protection, homeland security, intelligence support and verification, while phasing out or transferring to other sites its weapons plutonium, uranium, tritium, high explosives, radiographic hydro tests and warhead stockpile support functions.

This alternative, which was outlined by the Galvin Commission in the mid `90s, and which is, in effect, being secretly considered today by senior DOE officials, was not examined as a reasonable alternative in the EIS, and that is, I would remind everyone, legally unacceptable.

23/08.01 cont.

In light of the historical background just noted, it's clear that some fundamental premises of the current document are simply invalid. For example, the document states and stipulates, without any support, that achieving the goals of the stewardship program requires the continued operation of Lawrence Livermore National Laboratory. That simply is not true, and is easily demonstrated.

24/02.01

Even if Livermore disappeared tomorrow in an earthquake, the United States would be left with a very robust nuclear deterrent, and with full capabilities for maintaining the stockpile.

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Livermore is responsible now for only about 20 percent of the total U.S. war reserve stockpile, and by 2009 Livermore's fraction will be reduced to around 15 percent. 24/02.01 cont.

There are only four designs still in the stockpile that Livermore is connected with, the W-62 and the W-87, intercontinental ballistic missile warheads, the W-84 cruise missile warhead, and the B-83 bomb. The W-94 warheads are ground launch cruise missile warheads whose delivery systems were eliminated 15 years ago. They are not maintained as part of the active nuclear weapons stockpile. 25/01.03, 02.01, 08.01

Implementing the Moscow Treaty, W-62, in May of 2002, will result in the retirement of all 600 remaining Livermore designed W-62 ordinates by 2009. And, within the ten-year period covered by this document, Livermore will have only two warhead types, the W-87 and the B-83, remaining in its stockpile.

But, for the next five years the renovation of the B-83 is not scheduled, so this is a five-year window here at least, in which NSA could easily restructure weapons support activities within the complex, close out those functions,

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including fissile material operations at Livermore, with no, I repeat, no disruption of the current report activities for the nuclear stockpile.

Now, DOE, recognizing that Lawrence Livermore weaponeers don't have a lot to do, "redistributed the workload" and moved a Los Alamos design, the air launch cruise missile, the W-80, moved that design back to Livermore, so that Livermore would have something to do. And so, there's the question that DOE would have to face of taking those activities and moving them back to Los Alamos where they should never have left. 25/01.03, 02.01, 08.01 cont.

There has to be a better way to deal with a nuclear deterrent than returning to the spending levels and programs of the Cold War, but you won't find that reasonable alternative anywhere in this draft EIS.

And, just to demonstrate how artificial and artificially constrained the reasonable alternatives are in this EIS, just look at " I did, I compiled a list of the environmental metrics and how much they vary between the various alternatives from the environmental baseline in 2002, and they vary typically by -5, +5, -10 to +10 percent among all the alternatives. I mean, if there's no more 26/31.01, 08.01, 02.01

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dramatic demonstration then these alternatives are not really alternatives, they result in almost no environmental significant difference in the last impacts. 26/31.01, 08.01, 02.01 cont.

FACILITATOR BROWN: You are at the nine-minute mark.

MR. PAINE: Thank you.

And finally, another obvious defect of the document is it contains no consideration of reasonably foreseeable impacts on nuclear weapons proliferation, both vertical and horizontal, from, as noted by an earlier commenter, from restarting the laser isotope separation facilities, but also from developing detailed physics models and computer algorithms for simulating each stage in the nuclear explosion sequence, and some of the physics models that are being developed are being developed in the unclassified literature. Detailed implementation of those and conversion into computer algorithms is kept classified, but the necessary knowledge is being developed unclassified in various external research programs, often using alternative materials, and that knowledge can very easily be extended into the weapons domain. 27/01.01, 26.01

And finally, there's the use of fissile 28/26.01

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materials in the national ignition facility, a step that DOE expressly denied it was interested it, and essentially lied about when Congress first provided funds for construction for this facility back in 1997. 28/26.01 cont.

I'd like my written statement to be made part of the record.

FACILITATOR BROWN: Thanks.

Jim Bridgman.

MR. BRIDGMAN: Good morning, my name is Jim Bridgman. I'm the Program Director at the Alliance for Nuclear Accountability. The Alliance for Nuclear Accountability is a national network of over 30 organizations working together to ensure quality clean up of the nuclear weapons complex while trying to prevent future contamination and health effects by opposing unnecessary nuclear weapons research, development, production, testing and above all their use.

The Alliance for Nuclear Accountability has long been a champion of public participation and recognizes this opportunity required by the National Environmental Policy Act to comment on the Department of Energy's plans for one of the Nation's most significant nuclear weapons

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laboratories.

The plans for Livermore contained in this document speak volumes about the intended future mission of the nuclear weapons complex. The term stockpile enrichment, not stockpile stewardship, would more accurately reflect the ambitious and expensive course the Bush Administration has laid out for modernizing the arsenal and weapons complex in ways that far surpass a mission of stewardship for a declining arsenal.

DOE's stockpile enrichment at Livermore includes plans to increase storage limits of plutonium from 1,500 to 3,300 pounds. What does this mean? Plutonium is about ten times more toxic than nerve gas. Dispersion of just 3-1/2 ounces of plutonium could kill every person in a large office building. Thirty-three hundred pounds is enough for over 15,000 such dirty bombs, and enough for over 500 nuclear warheads. 29/33.01

Allowing this kind of material in an area like Livermore, that has 75,000 people, 20,000 families, and a population density of 3,000 people per square mile, for the purpose of national security is the height of irony and 30/23.01

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irresponsibility. And, I might add that the terrorist threats of theft are, therefore, an environmental and public health risk. 31/30.01

In addition to using this plutonium in experiments for the national ignition facility and AVLIS that DOE wants Livermore to develop the production line prototype for a modern pit facility, so it can try to figure out how to make the very messy job of creating plutonium pits, the cores and triggers of modern nuclear weapons, into a less messy one.

DOE's plutonium pit production at Rocky Flats was shut down after an FBI raid in 1989, because of dangerous fires in the " environmental contamination and mismanagement, costing U.S. taxpayers more than $7 billion to partially clean up. 32/37.01

The DOE wants Livermore to gin up some new plutonium pit production techniques using robotics, so it can pretend that making nuclear weapons is not such a big deal. Yet, making nuclear weapons is, and always will be, a very big deal, whether it's done in the United States or any other country in the world.

Livermore is to help lay the groundwork

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for a new plutonium bomb plant that will cost taxpayers billions of dollars to construct, hundreds of millions to operate each year, and billions more to clean up. The modern pit facility would, according to DOE plans, produce 125 to 450 pits per year, to maintain a "war size nuclear arsenal." Yet, the United States is a wash in plutonium pits, with over 10,000 in tact warheads and another estimated 12 to 15,000 pits in storage at the Pantex Plant in Texas. These pits are not falling apart, as some members of Congress and officials claim, studies by the DOE's own lab scientists have shown plutonium pits are lasting much longer than previously believed. 32/37.01 cont.

The United States should be reducing its arsenal, not building new weapons, as agreed to both in the recent Strategic Offensive Reductions Treaty between the United States and Russia, and in the mandate to disarm its nuclear arsenals under Article 6 of the Non-Proliferation Treaty, the treaty having more participants than any other treaty outside the U.N. Charter, and which the United States affirmed as recently as 2000, during the MPT Review Conference. 33/01.01

Implementing reductions in the 32/37.01 cont.

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stockpile will enable the United States to jettison its older warheads, thus further lowering the average age of the stockpile and further delaying any need for new plutonium pits. 32/37.01 cont.

The DOE doesn't just want the ability to produce replacement warheads for the massive arsenal, however, it wants to have the ability to build new kinds of nuclear warheads, so-called "mini-nucs," new cruise missile warheads and other advanced concepts. Building such weapons could well lead to a resumption of their testing.

The production and testing of new types of nuclear weapons would send a crystal clear message to the rest of the world, the United States has no interest in nuclear arms control unless it means controlling other nations' nuclear weapons. We strongly oppose this Administration's vision that would allow the United States to remain an entrenched nuclear power, that prioritizes counter-proliferation over non-proliferation, reduction of weapons of mass destruction above the production of good will through diplomacy. 34/02.01

The Alliance for Nuclear Accountability strongly supports an action alternative for Livermore that seeks an orderly phase out of its 35/08.02

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nuclear weapons programs in observance with the Non-Proliferation Treaty, that seeks to foster cost of research that is truly beneficial to human health and the environment. This plan, by comparison, is an imitation disaster, both in the risks it imposes on the Livermore community, and in the threat it poses to the global non-proliferation regime. 35/08.02 cont.

At a time of record budget deficits, the Livermore plan will be charged on the national credit card for the future generations to pay, the same generations that will have to pay for the health care and clean up in and around the Livermore site. What a risk. 36/03.01

FACILITATOR BROWN: Thanks.

That concludes the list of speakers who signed up ahead of time. If there's anybody here who would like to make further comments, or add to the comments you made, you are certainly welcome to do so.

Diane, okay.

MS. D'ARRIGO: Hi, I'm Diane D'Arrigo with Nuclear Information and Resource Service. We are a 25-year old, Washington-based, D.C. organization which has affiliates around the world

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actually, with the World Information Service on Energy.

We have very serious concerns about the ten-year plan for Livermore and its potential to " well, its clear intent to create more radioactive waste, to double the amount of plutonium that can be on the site, to bring ten times higher amounts of tritium to the site, to create waste that will be routinely emitted into the air and water in the vicinity, and for which there's no safe, permanent solution. 37/04.01

And so, our concerns are largely environmental, but we also believe that there's no good reason for the increases in the risks and the threats. Plutonium is clearly one of the most toxic elements in the world, and to handle it in the way that's proposed, aerosolizing and the AVLIS project, we are on record as opposing these projects in the past, and repeat that opposition today. 38/27.01

Adding to the radioactive risks of bio warfare agents is foolhardy and unacceptable. We oppose the plans for the AVLIS, for the tritium targets, for the increase in the plutonium limits, in the increase in the tritium level that would be 37/04.01 cont.

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allowed on site. We oppose the steps that this would bring to " the steps that this would take to bring us to renewed testing, at the Nevada Test Site or elsewhere. 37/04.01 cont.

The nuclear weapons complex clearly has no plan for what to do, no acceptable plan for what to do with the wastes that have already been generated. Our organization is working to prevent the current plans and the current activities of the Department of Energy to routinely release these materials into every-day consumer goods, recycling and releasing these materials as if not radioactive is part of the management plan for radioactive waste that's generated. We have expressed our opposition to the existing Order 5400.5, and all of the efforts that the Department has made to reverse the ban that was put in place on recycling radioactive metal, believe that moving in this direction at this site is a step in the wrong direction, and also have concerns about the Environmental Species Act violations, the " you know, increasing the kill rate, the acceptable takings. 39/22.04 40/16.03

And, of course, in a seismic area there are operational problems. We are currently 41/14.01

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intervening in many commercial reactor situations, based on the technical dangers of nuclear technology and believe that adding a bio warfare agent program and accelerating plutonium and other activities, tritium activities, in such close proximity to clear seismic dangers is also foolhardy. 41/14.01 cont.

We support the conversion of the lab to civilian research, and believe that the efforts should be put toward cleaning up the site completely to isolating the waste, not disbursing it, pretending it's not radioactive, and creating more wastes, when you've got nothing to do with what we've already generated. 42/07.01

Thank you.

FACILITATOR BROWN: Okay.

Is there anybody else who would like to add comments at this time?

Okay, we are scheduled, officially, I think to run somewhat longer, so customarily what we do in these circumstances is, we take a recess, folks are free at this point to talk to your neighbors, talk to DOE, head for home, whatever, and if someone decides they'd like to add comments, or if someone else shows up to speak, we will

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reconvene and take their statement.

So, we will recess at this point. Thank you.

(Whereupon, at 11:57 a.m., a recess until 12:59 p.m.)

FACILITATOR BROWN: It's 1:00, and I'm reconvening the Washington meeting of the Site-Wide Environmental Impact Statement, and asking if there are any other members of the public who would like to make a statement at this time?

Noting that there are no members of the public present at this point, and it being 1:00, this meeting is officially adjourned.

Thanks very much.

(Whereupon, the above-entitled matter was concluded at 12:59 p.m.)